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FLORIDA CUCUMBERS AND GREEN PEPPERS: PRODUCTION, MARKETING PATTERNS, PRICES, AND MARGINS



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FLORIDA CUCUMBERS AND GREEN PEPPERS: PRODUCTION, MARKETING PATTERNS, PRICES, AND MARGINS

By

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ABSTRACT: Florida is the leading domestic producer of many fall, winter, and spring vegetables. Increased competition from Mexican imports has hurt the Florida industry and, for some vegetables, has threatened the States's position as the major U.S. supplier. This report traces trends in production, marketing, prices, margins, and grower returns for Florida cucumbers and green peppers.

Key words: Cucumbers, green peppers, production, marketing, prices, margins, Florida, Mexico.

Summary

Cucumber and green pepper imports from Mexico increased sharply since the mid-1960's boosting that country's share of the U.S. market for both vegetables at the expense of U.S. suppliers. Florida's share of the market for peppers declined sharply in 1970, when a virus outbreak cut that State's production. Although the State's pepper crop has now partially recovered, Florida has not fully regained its former share. Florida generally maintained its share of the U.S. market for cucumbers since the mid-1960's as other State's share was reduced.

Western and midwestern cities have declined in importance as markets for Florida cucumbers and green peppers since the mid-1960's as a result of larger Mexican sales in many of these cities. Eastern cities provide the major market for the two Florida vegetables, with New York City being the single most important market.

The retail price of cucumbers and green peppers in New York City has increased since the mid-1960's, with most of the rise in green pepper prices occurring after 1969. The wholesale-retail margin, the shipping point-wholesale margin, harvesting, packing, and selling costs, and Florida grower returns also increased in the period. Other than a slight widening in the percent shipping point-wholesale margin for green peppers, the market shares, or percentage of the retail value, taken by the grower and other market factors did not show any significant trend since the mid-1960's for either cucumbers or green peppers.

Production

Data on domestic production of cucumbers and green peppers are from the Statistical Reporting Service (SRS). Imports are reported by the Bureau of the Census.

Cucumbers

The total U.S. supply of fall, winter, and spring cucumbers for fresh consumption, while fluctuating seasonally, remained fairly stable for 1964/65-1973/74 (table 1). However, the United States became more dependent on foreign imports, which more than tripled during the 10 seasons, to offset a sharp decline in U.S. production. All of the increase in cucumber imports was from Mexico. Imports from Mexico totaled 86,000 tons in 1973/74, more than five times the quantity supplied in 1964/65. Mexico accounted for 93 percent of U.S. imports and 38 percent of total U.S. fall, winter, and spring supplies in 1973/74, both considerably higher than in 1964/65.

Fall, winter, and spring cucumbers are produced principally in six States. Florida is the major grower, accounting for 41-50 percent of the U.S. crop in nine of the last 10 seasons. Most of the decline in U.S. production occurred in California, North Carolina, and South Carolina. Production in Florida, although fluctuating seasonally, remained stable over the 10 seasons. Florida maintained its share of total U.S. supply during this period.

Green Peppers

The total U.S. supply of winter and spring green peppers increased from 75,800 tons in 1964 to 125,300 tons, or 60 percent (table 2). Although U.S. production increased slightly, imports went up faster during the period and accounted for an increasing share of the total supply.

Mexico is the primary exporter of green peppers to the United States, supplying 92-97 percent of each year's imports. Imports from Mexico totaled 40,400 tons in 1974, more than seven times the quantity supplied in 1964. Mexico accounted for nearly one-third

Table 1—Cucumbers, fresh, fall, winter and spring: U.S. production, imports, and total U.S. supply, 1964/65-1973/74

Season	U.S. production					Imports					Total U.S. supply
	Florida		Other States ¹		Total	Mexico		Other countries ²		Total	
	Amount	Share of total supply	Amount	Share of total supply		Amount	Share of total supply	Amount	Share of total supply		
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	1,000 tons
1964/65	94.2	44.6	87.6	41.5	181.8	15.5	7.4	13.8	6.5	29.3	211.1
1965/66	101.5	44.8	89.4	39.5	190.9	23.2	10.3	12.2	5.4	35.4	226.3
1966/67	82.1	36.6	98.4	43.9	180.5	30.3	13.5	13.5	6.0	43.8	224.3
1967/68	99.0	42.8	94.4	40.8	193.4	29.2	12.7	8.6	3.7	37.8	231.2
1968/69	72.8	32.0	94.2	41.5	167.0	48.3	21.3	11.9	5.2	60.2	227.2
1969/70	67.8	29.4	96.8	41.9	164.6	55.7	24.1	10.6	4.6	66.3	230.9
1970/71	69.0	30.8	69.8	31.2	138.8	78.0	34.8	7.1	3.2	85.1	223.9
1971/72	87.3	38.4	61.3	27.0	148.6	71.9	31.7	6.5	2.9	78.4	227.0
1972/73	84.6	35.8	59.8	25.3	144.4	86.8	36.7	5.3	2.2	92.1	236.5
1973/74	72.2	31.9	60.6	26.8	132.8	86.5	38.2	6.9	3.0	93.3	226.1

¹ California, North Carolina, South Carolina, Texas, and Virginia. ² Bahamas, Canada, and Guatemala.

Table 2—Green peppers, fresh, winter and spring: U.S. production, imports and total U.S. supply, 1964-74

Season	U.S. production					Imports					Total U.S. supply
	Florida		Other States ¹		Total	Mexico		Other countries ²		Total	
	Amount	Share of total supply	Amount	Share of total supply		Amount	Share of total supply	Amount	Share of total supply		
	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	1,000 tons	Percent	1,000 tons	Percent	1,000 tons	1,000 tons
1964	64.2	84.7	6.0	7.9	70.2	5.4	7.1	.2	.3	5.6	75.8
1965	61.8	81.0	6.0	7.9	67.8	7.9	10.3	.6	.8	8.5	76.3
1966	69.8	82.6	3.2	3.8	73.0	10.7	12.7	.8	.9	11.5	84.5
1967	72.3	78.0	7.5	8.1	79.8	12.1	13.0	.8	.9	12.9	92.7
1968	77.6	83.8	3.8	4.1	81.4	10.4	11.2	.8	.9	11.2	92.6
1969	69.9	72.4	6.3	6.5	76.2	18.8	19.5	1.5	1.6	20.3	96.5
1970	32.0	46.8	6.3	9.2	38.3	28.2	41.2	1.9	2.8	30.1	68.4
1971	39.6	43.4	15.8	17.3	55.4	34.3	37.6	1.5	1.7	35.8	91.2
1972	53.2	52.3	18.5	18.2	71.7	28.4	27.9	1.6	1.6	30.0	101.7
1973	63.2	53.8	13.1	11.1	76.3	39.7	33.8	1.5	1.3	41.2	117.5
1974	66.2	52.8	17.4	13.9	83.6	40.4	32.3	1.3	1.0	41.7	125.3

¹ California, Louisiana and Texas. ² Principally Dominican Republic.

of total U.S. supplies in 1974, considerably more than in 1964.

U.S. production of winter and spring green peppers are reported in California, Florida, Louisiana, and Texas. Florida accounted for over 90 percent of the U.S. crop in 1964-69. Florida's crop was sharply reduced beginning in 1970, as the result of a severe outbreak of virus. Production has partially recovered and accounted for nearly 80 percent of the U.S. crop in 1973/74. However, Florida's share of total U.S. supplies dropped from 85 percent in 1964 to 53 percent in 1974.

Marketing Patterns

To get a better idea of where Florida cucumbers and green peppers are being sold, unload data from the

Agricultural Marketing Service (AMS) for 1963 through 1973 were evaluated. These data identify the source of monthly rail and truck unloads in 41 major U.S. cities. Carlots were converted to tons using AMS conversion factors to allow for different carlot weights during the period.

Cucumbers

A large part of Florida's cucumber production is marketed in the East—60 percent of the 1971-73 unloads went to eastern cities, with New York City alone taking about 25 percent (Figure 1). The Midwest was the second largest market, taking 28 percent of the unloads. Eleven percent were unloaded in the South and only 1 percent in the West. Mexico supplied most of the

cucumbers unloads in many western and midwestern cities during its shipping season.

Changes have occurred in the distribution of Florida cucumbers since the early 1960's. The quantity of Florida cucumbers unloaded in 41 U.S. cities declined slightly over 10 percent from 1963-65 to 1971-73 (Figure 2). The trading area for Florida cucumbers narrowed somewhat, with 5 percent more unloads moving to southern cities. Considerably fewer Florida cucumbers went to the West (74 percent) and the Midwest (18 percent), reflecting stronger competition from Mexico for these markets.

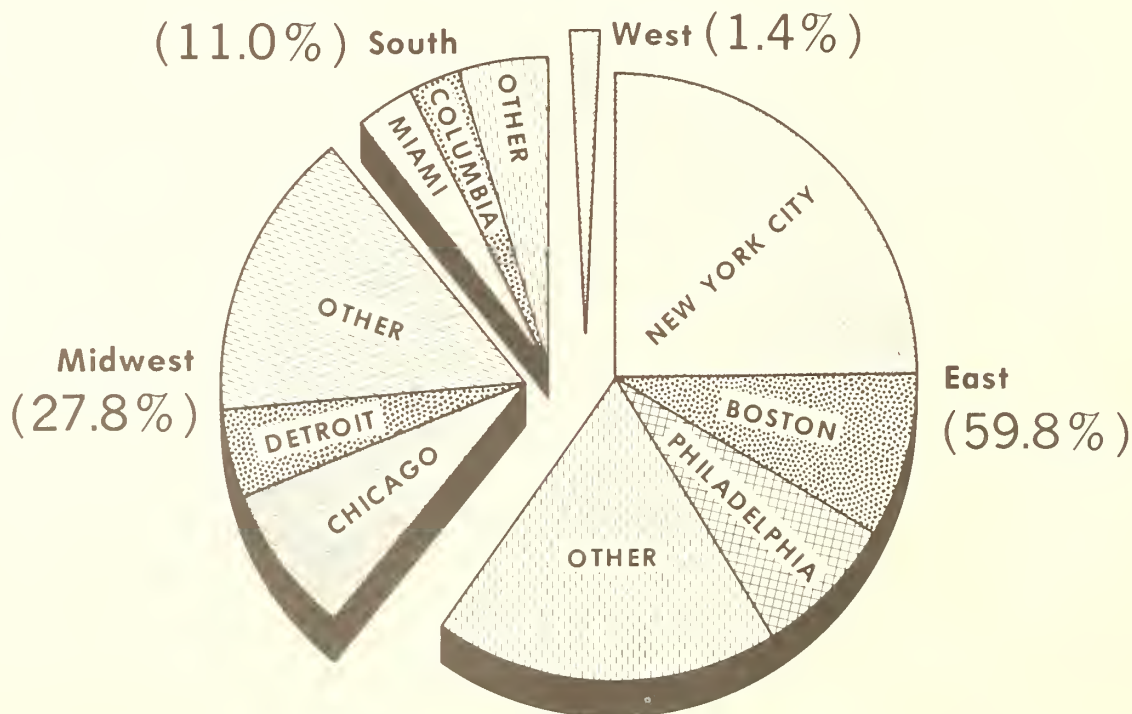
Trucks are playing an increasingly important role in moving Florida cucumbers to market. About 95 percent of the 41 city unloads arrived by truck in 1971-73, up from 84 percent in 1963-65 (Figure 3). Truck transportation's share increased in each region, with the Midwest having the greatest increase. Over 90 percent of the unloads in each region moved by truck in 1971-73. There were no reported rail unloads of Florida cucumbers in any southern or western city in 1971-73.

Figure 4 shows monthly cucumber unloads in New York City for 1971-73 by place of origin. Florida is the major supplier for New York City in the fall and spring months. Florida supplies begin in October and end in June, peaking in November and again in May. Mexican cucumbers dominate the winter months, when Florida shipments are usually limited. In the summer New York City unloads are from various States, mainly New York, New Jersey, and Virginia.

Green Peppers

Marketing patterns for Florida green peppers are similar to those of Florida cucumbers. Nearly two-thirds of green pepper unloads from Florida went to eastern cities in 1971-73 (Figure 5). New York City accounted for slightly over one-third of the total, with Boston and Philadelphia taking about 10 percent each. The Midwest took 20 percent of the unloads, the South 11 percent, and the West 3 percent.

DISTRIBUTION OF FLORIDA CUCUMBER UNLOADS IN THE U.S., 1971-73



USDA

NEG. ERS 1047 - 75 (4)

Figure 1

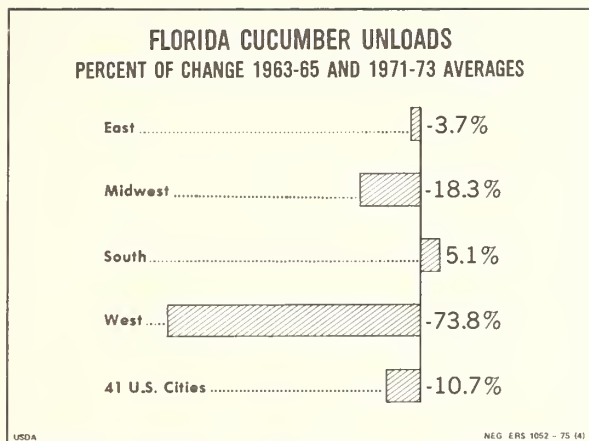


Figure 2

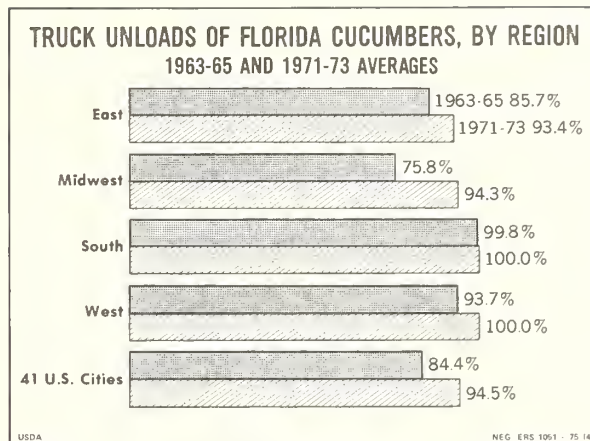


Figure 3

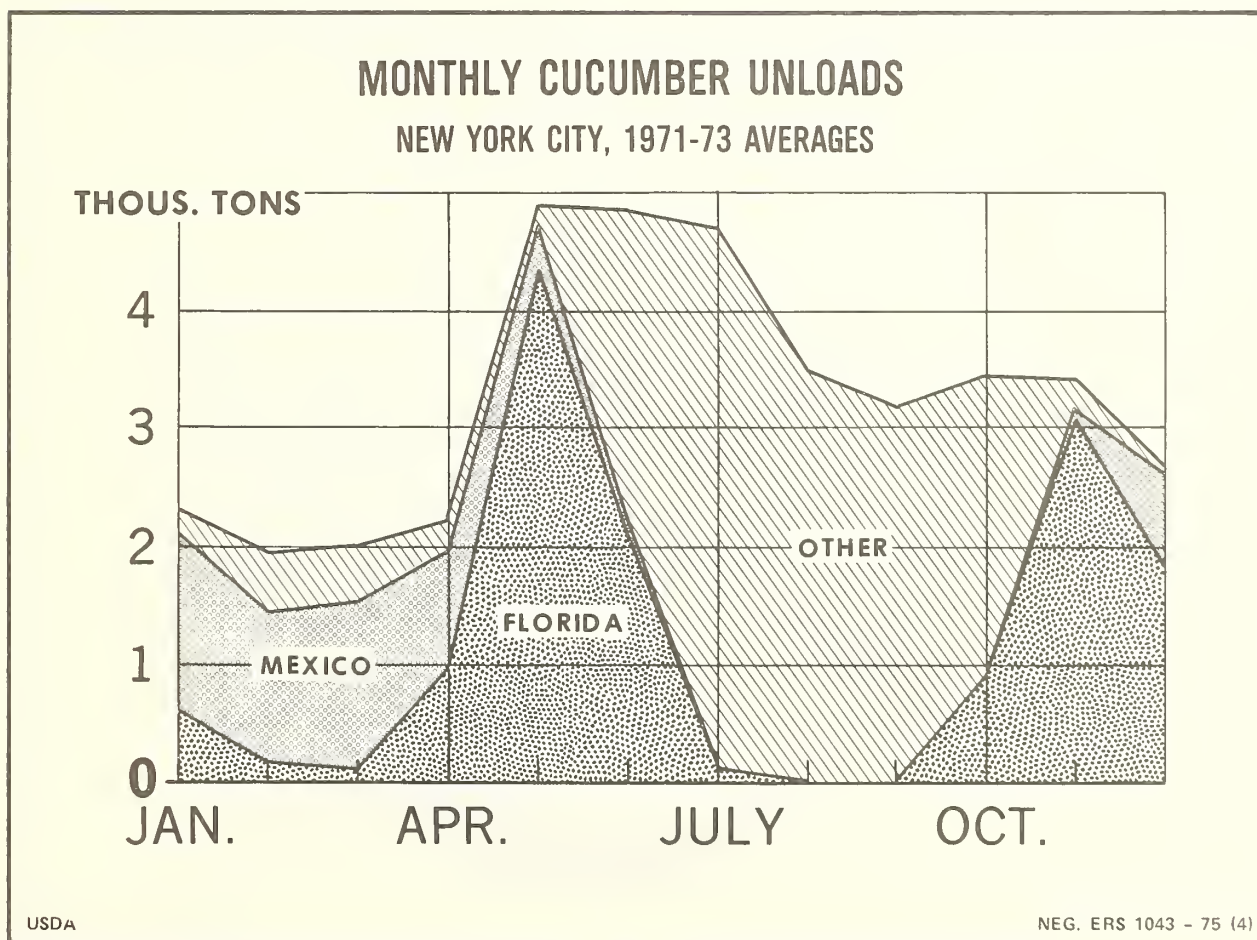


Figure 4

The quantity of Florida green peppers unloaded in 41 U.S. cities declined 9.6 percent from 1963-65 to 1971-73 (Figure 6). As with cucumbers, most of the decline was in the West (65 percent) and the Midwest (16 percent), reflecting increased competition from Mexican peppers. Unloads in the East increased about 1 percent.

Trucks also play an increasingly important role in the movement of Florida green peppers, with their share of the 41 city unloads rising from 79 percent in 1963-65 to 97 percent in 1971-73 (Figure 7).

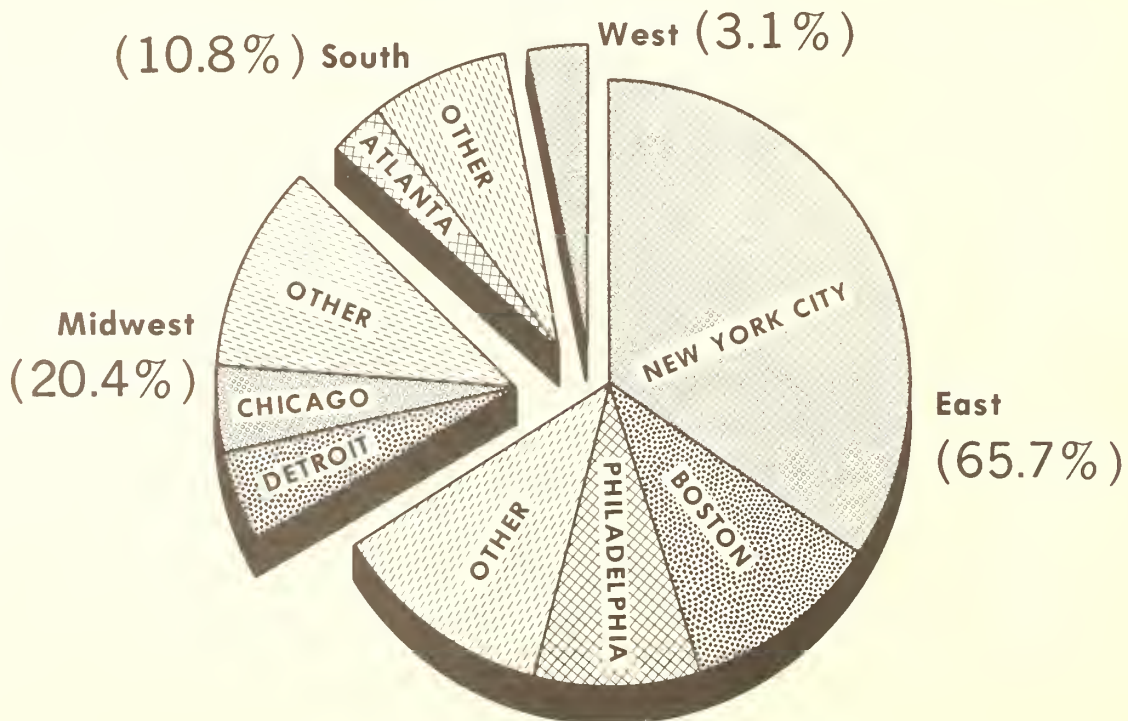
Unloads of Florida green peppers in New York City begin in October and end in August, peaking in January and again in June (Figure 8). Florida peppers clearly dominate the market each month from November through June. The Mexican peppers enter the market each month from December through June, but in a considerably smaller volume than Florida supplies. In the summer, unloads are mainly from Texas and New Jersey.

Prices and Margins

Cucumbers and green peppers were priced at three levels—Florida shipping points and wholesale and retail in New York City. New York City was selected because of its importance in the marketing of Florida cucumbers and peppers. Retail prices were collected monthly by the Bureau of Labor Statistics in a sample of retail stores on Tuesday, Wednesday, and Thursday of the first week containing a Tuesday. The wholesale price used is the Tuesday price for the retail pricing week. The shipping point price used is an average of daily prices for the week preceding the retail pricing week. Shipping point prices and wholesale prices are reported by the Federal-State Market News Service. Monthly prices are weighted by monthly Florida unloads in New York City to obtain the average price for the season.

The retail value of a bushel of cucumbers or peppers is the return to the retailer for saleable cucumbers or peppers (retail price minus 8 percent allowance for spoilage loss during the marketing process). Harvesting,

DISTRIBUTION OF FLORIDA GREEN PEPPER UNLOADS IN THE U.S., 1971-73



USDA

NEG. ERS 1048 - 75 (4)

Figure 5

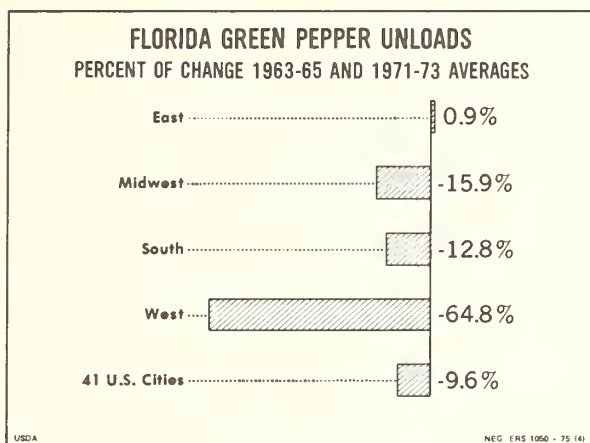


Figure 6

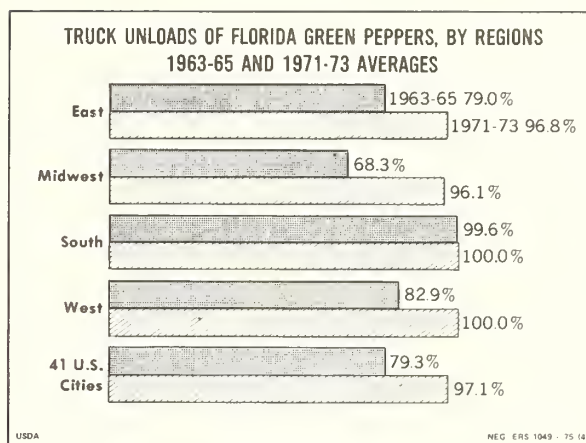


Figure 7

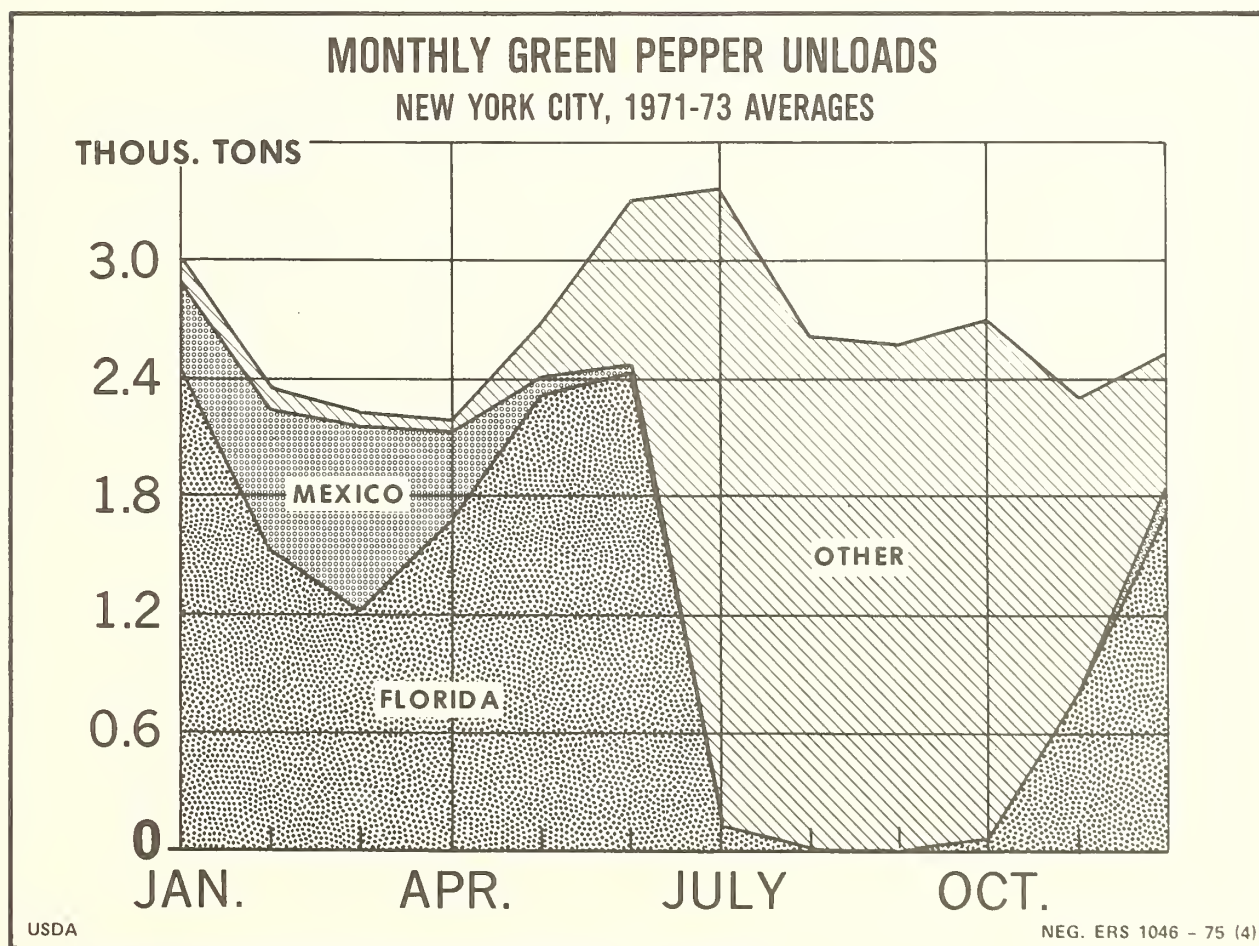


Figure 8

packing and selling costs are reported by the Florida Agricultural Experiment Station. Grower returns are derived from the shipping point price by deducting harvesting, packing, and selling costs. The wholesale-retail margin, derived by deducting wholesale price from retail value, is payment for secondary wholesaling, intracity transportation, and retailing. The shipping point-wholesale margin, derived by deducting shipping point price from wholesale price, is payment for transportation from shipping point and primary wholesaling.

Cucumbers

The retail price of cucumbers in New York City in the fall, winter, and spring months increased on the average about 1 cent a pound per season between 1964/65 and 1973/74. The New York City retail price averaged 32.7 cents per pound in 1973/74, 9.5 cents more than nine seasons earlier (Table 3). The retail value of a 51-pound bushel of cucumbers averaged \$15.35 in 1973/74, 41 percent higher than in 1964/65 (Figure 9). Returns to Florida growers for cucumbers sold in New York City increased 37 percent, from \$2.73 to \$4.23 per bushel. Harvesting, packing, and selling costs rose from \$1.84 to \$2.99, a 62 percent increase. The shipping point-wholesale margin nearly doubled and the wholesale-retail margin increased 13 percent to \$5.63 per bushel in 1973/74. However, a larger wholesale-retail margin existed in three of the last five seasons.

A simple trend line fitted to the data in table 3 indicates that the retail value of cucumbers sold in New York City increased an average of 52 cents per bushel per season since 1964/65. During the same period, the wholesale-retail margin increased 29 cents per bushel per season; the shipping point-wholesale margin rose 2 cents; harvesting, packing, and selling went up 11 cents; and grower returns rose 10 cents.

The market shares or percentage of the retail value going to growers and other market factors fluctuated from season to season, but did not show any significant trend over the period. For the 10 years, the wholesale-retail margin averaged 40 percent of the retail value; the shipping point-wholesale margin, 16 percent;

harvesting, packing, and selling costs, 17 percent; and grower returns, 27 percent.

Green Peppers

Winter and spring green pepper prices increased sharply at all levels between 1964 and 1974, with most of the increase occurring after 1969. The retail price of green peppers in New York City rose to 55.5 cents a pound in 1974, 62 percent higher than in 1964, again with most of the increase dating after 1969 (table 4). The retail price in 1970 increased to 58.9 cents a pound, 19.3 cents higher than a year earlier, resulting from the sharp drop in Florida green pepper supplies. Florida pepper supplies increased and retail prices declined slightly after 1970.

The retail value of a 30-pound bushel of green peppers averaged \$15.32, sharply higher than 10 seasons earlier (Figure 10). Florida grower returns averaged \$4.76 per bushel in 1974, about one-third more than in 1964. However, grower returns were more than double the 1964 level in both 1970 and 1971. Harvesting, packing, and selling costs in 1974 were about three-fourths more than 1964. The wholesale-retail margin was about two-thirds larger and the shipping point-wholesale margin more than doubled during the period.

A simple trend analysis indicates that the retail value of green peppers sold in New York City increased an average of 78 cents a bushel per season during 1964-74. During that period, grower returns increased 26 cents a bushel per season; the wholesale-retail margin went up 28 cents; the shipping point-wholesale margin rose 16 cents; and harvesting, packing, and selling costs went up 8 cents.

The shipping point-wholesale margin's share of the retail value of green peppers increased on the average about one-half of a percentage point per season. Other market shares declined slightly, but not by a significant amount. For the period, the wholesale-retail margin averaged 39 percent of the retail value; the shipping point-wholesale margin, 11 percent; harvesting, packing, and selling costs, 13 percent; and grower returns 37 percent.

Table 3—Florida cucumbers, fall, winter, and spring: Seasonal average prices, margins, costs, and returns, New York City¹

Season	Retail price	Retail value	Wholesale-retail margin ³		Shipping point-wholesale margin ⁴		Harvesting, packing and selling costs ⁵		Grower returns ⁶	
	Per pound	Per bushel ²	Per bushel	Percent- age of retail value	Per bushel	Percent- age of retail value	Per bushel	Percent- age of retail value	Per bushel	Percent- age of retail value
	Cents	Dollars	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
1964/65	23.2	10.88	5.00	46	1.31	12	1.84	17	2.73	25
1965/66	24.4	11.44	3.52	31	3.36	29	1.86	16	2.70	24
1966/67	22.3	10.46	3.32	32	1.46	14	1.94	18	3.74	36
1967/68	22.1	10.37	4.56	44	1.50	14	2.05	20	2.26	22
1968/69	29.0	13.61	3.97	29	2.61	19	2.06	15	4.97	37
1969/70	28.9	13.56	6.44	47	1.49	11	2.16	16	3.47	26
1970/71	28.6	13.42	5.63	42	2.05	15	2.43	18	3.31	25
1971/72	29.7	13.94	6.27	45	1.89	13	2.48	18	3.30	24
1972/73	30.3	14.21	6.48	46	2.02	14	2.61	18	3.10	22
1973/74 ⁷	32.7	15.35	5.63	37	2.50	16	2.99	19	4.23	28

¹ 7-month weighted average (Nov.-May), 51 pounds net weight per bushel. ² Returns to retailer for salable cucumbers (8 percent allowance for loss incurred during marketing process).

³ Retail price minus wholesale price (the amount received for secondary wholesaling, intra city transportation, and retailing).

⁴ Wholesale price minus shipping point price (the amount received for transportation from shipping points and primary

wholesaling). ⁵ Weighted average computed from Brooke, D. L.,

"Costs and Returns from Vegetable Crops in Florida, Season 1972/73. With Comparisons, Fla. Agr. Expt. Sta., Economics Rpt. 59, March 1974 (also similar reports for earlier years).

⁶ Derived by deducting harvesting, packing, and selling costs from shipping point price. ⁷ Preliminary.

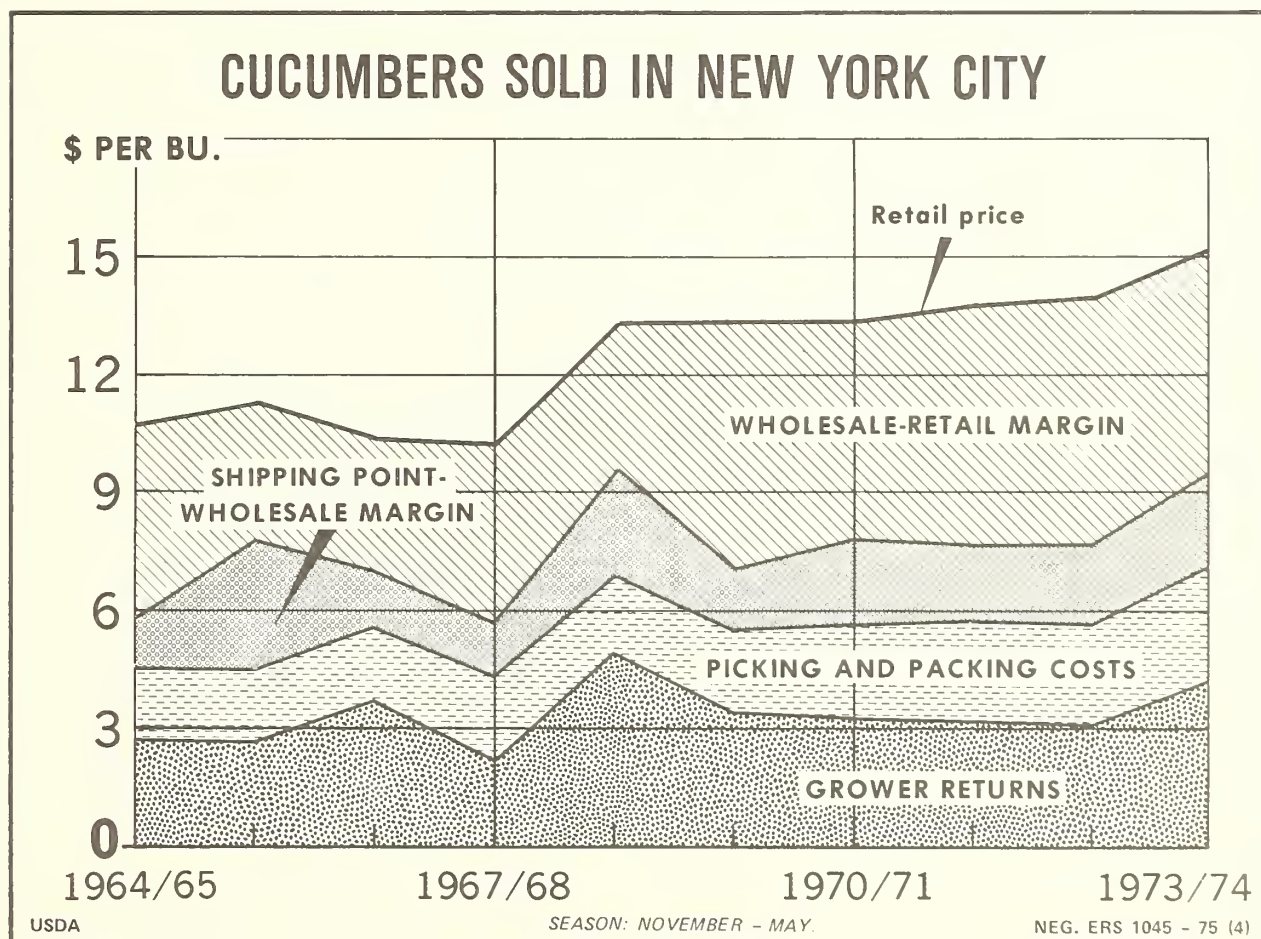


Figure 9

Table 4—Florida green peppers, winter and spring: Seasonal average prices, margins, costs and returns, New York City¹

Season	Retail price	Retail value	Wholesale-retail margin ³		Shipping point-wholesale margin ⁴		Harvesting, packing and selling costs ⁵		Grower returns ⁶	
	Per pound	Per bushel ²	Per bushel	Percent-age of retail value	Per bushel	Percent-age of retail value	Per bushel	Percent-age of retail value	Per bushel	Percent-age of retail value
	Cents	Dollars	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
1964	34.2	9.44	3.95	42	0.73	8	1.18	12	3.58	38
1965	33.0	9.11	3.52	39	.96	10	1.42	16	3.21	35
1966	36.2	9.98	4.19	42	.90	9	1.39	14	3.50	35
1967	35.3	9.76	3.99	41	.95	10	1.40	14	3.42	35
1968	38.6	10.65	3.76	35	1.37	13	1.52	14	4.00	38
1969	39.6	10.93	5.03	46	.88	8	1.62	15	3.40	31
1970	58.9	16.26	5.48	34	1.74	11	1.87	11	7.17	44
1971	58.1	16.04	5.09	32	1.20	7	1.78	11	7.97	50
1972	51.4	14.19	5.47	38	2.39	17	1.68	12	4.65	33
1973	56.6	15.62	5.91	38	2.68	17	1.93	12	5.10	33
1974 ⁷	55.5	15.32	6.54	43	1.97	13	2.05	13	4.76	31

¹ 6-month weighted average (Jan.-June), 30 pounds net weight per bushel. ² Returns to retailer for salable peppers (8-percent allowance for loss incurred during marketing process).

³ Retail price minus wholesale price. (The amount received for secondary wholesaling, intra city transportation and retailing).

⁴ Wholesale price minus shipping point price (the amount received for transportation from shipping point and primary

wholesaling). ⁵ Weighted average computed from Brooke, D. L., Costs and Returns from Vegetable Crops in Florida, Season 1972-73 With Comparisons, Fla. Agr. Expt. Sta., Economics Rpt. 59, Mar. 1974. (also similar reports for earlier years).

⁶ Derived by deducting harvesting, packing, and selling costs from shipping point price. ⁷ Preliminary.

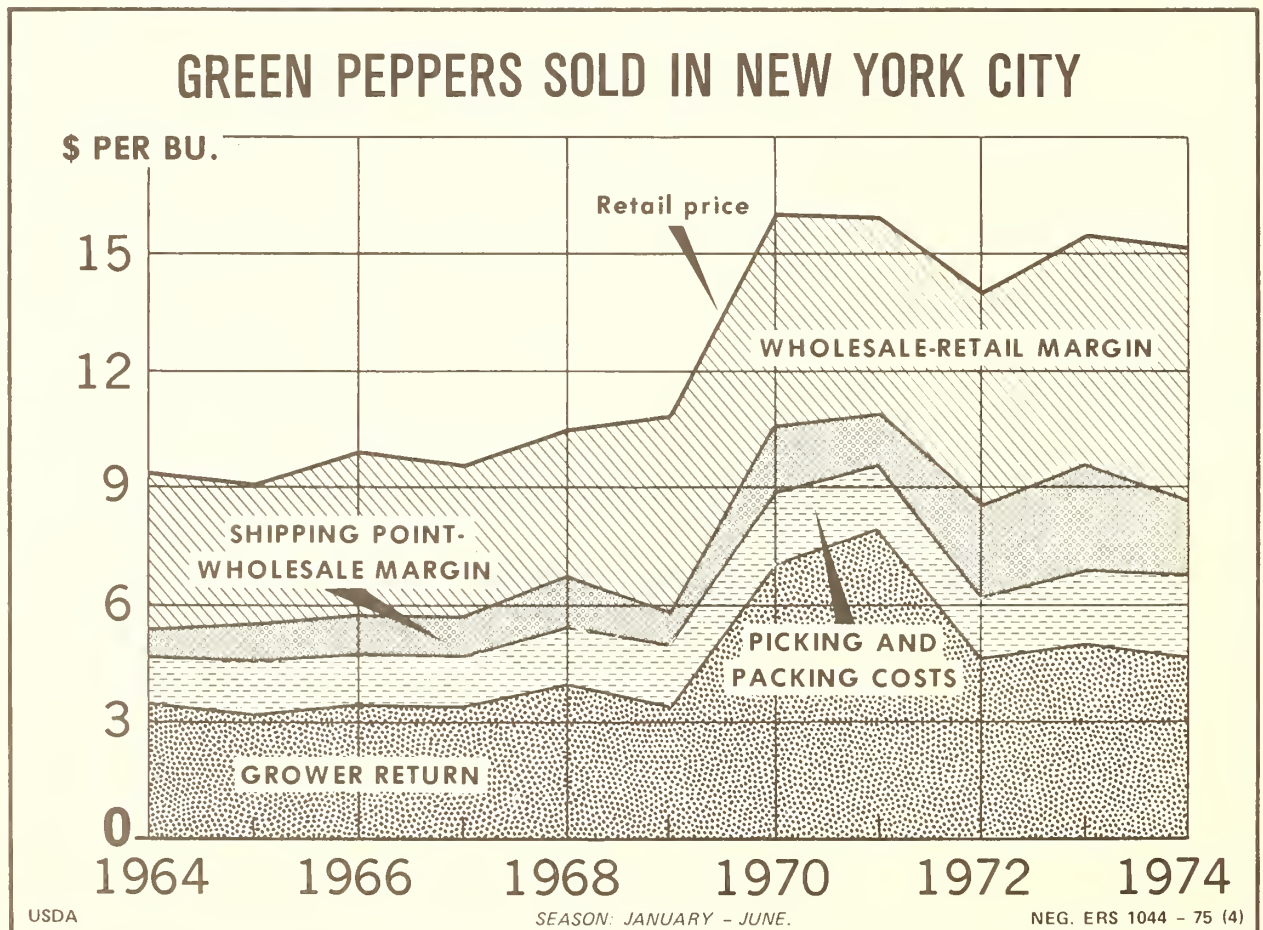


Figure 10



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